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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,028	08/15/2001	Markku Verkama	083531-0279295	9392
909 7590 11/28/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER IQBAL, KHAWAR	
			ART UNIT 2617	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/830,028

Applicant(s)

VERKAMA, MARKKU

Examiner

Khawar Iqbal

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9-18-07 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12, 14-17 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Tseng et al (6172974) in views of Navaro et al (6108560).

Regarding claims 1-3 Tseng et al teaches a digital telecommunication system comprising (fig. 2,4):

a first center (MSC 12 A) configured to enable speech communication between a plurality of terminals (MS A, MS B), the first center being associated with a calling terminal (MS A) and including a first transcoder unit (24) (col. 4, 35-56);

a second center (12 B) configured to enable speech communication between a plurality of terminals (MS A, MS B), the second centre being associated with a called terminal (MS B) and including a second transcoder unit (24) (col. 4, 35-56),

wherein at least one of the first (MSC 12 A) and second centres (12 B) comprises a mobile switching centre (fig. 2),

wherein the first and second transcoder units (originating MSC element 24 and terminating MSC, element 24) and each of the terminals (MS A, MS B) include speech codecs, in which each of the speech codecs comprises an encoder unit and decoder unit (col. 4, 35-56, col. 7, lines 1-40),

wherein the terminals are arranged to provide information regarding the supported speech codecs to their associated switching centers (various tones that indicates the type of transcoding and cross transcoding are predefined during the network setup) (col. 5, 33-65, col. 9, lines 40-65);

the first centre is configured to perform handshaking (bypass) with the second center, the handshaking including indication of the speech codecs supported by the calling terminal (col. 9, lines 40-65);

wherein at least one of the first and second centres is configured to establish call connections that bypass one or more of the transcoder units or to control the transcoder units to transmit encoded speech between the called and calling terminals without performing speech encoding operations so that speech is encoded and decoded only in the terminals (col. 7, lines 1-40, col. 9, lines 40-65). Tseng et al does not specifically

state wherein at least one of the first and second centres is configured to choose the speech codec used commonly by the calling and called terminals.

In an analogous art, Navaro et al teaches wherein at least one of the first and second centres is configured to choose the speech codec used commonly by the calling and called terminals (col. 8, line 5-col. 9, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Tseng et al by specifically adding features centre is configured to choose the speech codec used commonly by the calling and called terminals in order to enhance system performance improves voice quality, when the codecs supported are of common type, tandem free operation is established and hence quality of GSM link is maximized. As appropriate codec is selected, based on signaling information with reference to data provided in the form of look-up table, the quality of the link is maximized. Provides communication link wherein the signal quality is maintained at or around the best signal quality for the given codecs available as taught by Navaro et al.

Regarding claim 14 Tseng et al teaches a mobile switching centre in a digital telecommunication network configured to receive information regarding supported speech codecs of a calling terminal and each of the terminals (MS A, MS B) include speech codecs, in which each of the speech codecs comprises an encoder unit and decoder unit, and connect a transcoder located in a transcoder unit to a call connection when required, wherein (col. 4, 35-56, col. 7, lines 1-40):

the mobile switching centre is configured to perform handshaking with another centre associated with a called terminal (col. 5, 33-65,col. 9, lines 40-65), the

handshaking including indication of speech codecs supported by the calling terminal associated with the centre (col. 5, 33-65, col. 9, lines 40-65), and

the mobile switching centre is configured to connect a call connection that bypasses the transcoder unit or to control the transcoder unit to transmit the encoded speech without performing speech encoding operations in such a way that speech encoding and decoding are only performed in the calling or called terminal (col. 7, lines 1-40, col. 9, lines 40-65). Tseng et al does not specifically state wherein at least one of the first and second centres is configured to choose the speech codec used commonly by the calling and called terminals.

In an analogous art, Navaro et al teaches wherein at least one of the first and second centres is configured to choose the speech codec used commonly by the calling and called terminals (col. 8, line 5-col. 9, line 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Tseng et al by specifically adding features centre is configured to choose the speech codec used commonly by the calling and called terminals in order to enhance system performance improves voice quality, when the codecs supported are of common type, tandem free operation is established and hence quality of GSM link is maximized. As appropriate codec is selected, based on signaling information with reference to data provided in the form of look-up table, the quality of the link is maximized. Provides communication link wherein the signal quality is maintained at or around the best signal quality for the given codecs available as taught by Navaro et al.

Regarding claim 4 Tseng et al teaches wherein the handshaking is performed as outband signaling (col. 9, lines 40-65).

Regarding claim 5 Tseng et al teaches wherein the first and second centres are configured to perform the handshaking in association with a routing information inquiry issued in response to a determination that the called terminal is a mobile subscriber (col. 9, lines 40-65, see claim 1).

Regarding claims 6,7 Tseng et al teaches the first center is configured to send the routing information inquiry including information associated with the speed coded sported by the calling terminal (col. 7, lines 1-40,. 9, lines 40-65, see claim 1).

Regarding claims 8,9 Tseng et al teaches wherein the first and second centres are configured to perform the handshaking in association with inter-MSC signaling (col. 6, lines 30-63, col. 7, lines 1-40,. 9, lines 30-65, figs. 2 and 4).

Regarding claims 10,11 Tseng et al teaches wherein, when required, at least one of the first and second centre is configured to notify the associated of the speech codec it has to use as the result of the handshaking (col. 7, lines 1-40,. 9, lines 40-65, see claim 1).

Regarding claim 12 Tseng et al teaches wherein a pulse code modulated digital link exists between the first and second centres, and the first and second centres are configured to control their respective transcoder units to adapt an encoded speech signal to one or more least significant bits of PCM samples without transcoding (col. 4, 35-56).

Tseng et al teach regarding claims 15-17 signaling is ISUP setup is an IAM and ANM message (see fig. 2).

4. Claims 13 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Tseng et al (6172974) in views of Navaro et al (6108560) and Hellwig et al (6295302).

Tseng et al and Navaro et al do not specifically state the system configured to support packet link.

In an analogous art, Hellwig et al teaches the system configured to support packet link (col. 8, lines 16-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Tseng et al and Navaro et al by specifically adding features packet link in order to enhance system performance improves voice quality, when the codecs supported are of common type, tandem free operation is established and hence quality of internet link is maximized as taught by Hellwig et al.

Response to Arguments

5. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khawar Iqbal whose telephone number is 571-272-7909.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGE ENG can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Khawar Iqbal


GEORGE ENG
SUPERVISORY PATENT EXAMINER